SUMMARY

UNDERLYING NEED FOR ACTION

Electrical consumers in the Pacific Northwest and Western states need increased power production to serve increasing demand, and high-voltage transmission services to deliver that power.

BACKGROUND

The Umatilla Generating Company, L.P., a Delaware limited partnership, proposes to construct a gas-fired combined cycle electric power generation plant near Hermiston, Oregon. The plant would have a nominal generation capacity of 550 megawatts (MW). Electric power from the proposed plant would enter the regional grid at the Bonneville Power Administration's McNary Substation. The Umatilla Generating Company, L.P. has requested that Bonneville Power Administration provide the necessary electrical connection at the McNary Substation. Providing the connection triggers the requirement for the Bonneville Power Administration to conduct an environmental analysis pursuant to the National Environmental Policy Act (NEPA). Bonneville Power Administration (BPA) has prepared this environmental impact statement to fulfill that requirement.

RELATED STATE ACTIONS

Oregon does not have a state law equivalent to NEPA. Instead, environmental review is conducted through the state's energy facility siting procedures. Before construction of an energy facility is approved in Oregon, the Energy Facility Siting Council (EFSC) must find that the proposed facility meets certain standards, including environmental standards, pursuant to Oregon Administrative Rule Chapter 345, Division 21, Section 045. If satisfied that a proposed project meets the standards, the EFSC issues a Site Certificate that permits the project to be built.

In 1995, the Umatilla Generating Company, L.P. proposed to build a 481-MW power plant at the same site as the currently proposed 550-MW plant. An application for a site certificate was submitted to the Energy Facility Siting Council in July 1995, but before a certificate could be issued the Umatilla Generating Company requested that its processing be delayed. After modifying the proposed project somewhat, the Umatilla Generating Company, L.P. submitted an amended application for a site certificate in February 2001. Review of the amended application by state agencies will proceed concurrent with the NEPA review process.

SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT

This environmental impact statement contains an evaluation of two primary alternatives: the proposed action and the No Action Alternative. In the No Action Alternative, BPA would decide not to provide a connection to the regional electric power transmission grid for the proposed Umatilla Generating Project. In the proposed action, BPA would provide a connection to the regional grid for the Umatilla Generating Project at the McNary Substation. Without access to the grid, the proposed Umatilla Generating Project would not be feasible. Thus, in the No Action Alternative, the Umatilla Generating Project would not be built. A summary of the predicted performance of the proposed action and no action alternatives in accordance with technical, economic and environmental decision factors is provided in Table S-1.

COMPONENTS OF THE PROPOSED ACTION

The principal components of the proposed action are as follows:

- modifications to the McNary Substation to accommodate power from the Umatilla Generating Project

- a new 550-MW gas-fired combined-cycle electric power generation plant located on lands zoned for industrial purposes near Hermiston, Oregon

- approximately 11 miles (18 kilometers) of reconductored electric power transmission line and approximately one-half mile (0.8 kilometers) of new electric power transmission line on new power poles

- up to five miles (eight kilometers) of new natural gas pipeline to deliver fuel to the proposed power plant site

- approximately one-third mile (one-half kilometer) of new pipeline to deliver raw water to the proposed power plant site

- approximately three miles (five kilometers) of new pipeline on Madison Farms property, including the short pipeline between the proposed power plant site and the Hermiston Generating Plant, used to deliver reclaimed water from the proposed power plant for irrigation of cropland

MAJOR CONCLUSIONS

The Umatilla Generating Project would have no significant adverse effects on the environment. No mitigation measures other than those included in the proposed project are necessary. The following paragraphs briefly summarize the factors leading to this conclusion.

Geology, Soils, and Seismicity

The proposed project would have minimal effects on geology, soils and seismicity. The proposed power plant would be located on a flat site. The associated natural gas, water and reclaimed water pipelines and electric power transmission lines would be located in gently sloping areas. The proposed project would not be especially vulnerable to geologic hazards and thus would not increase the overall or cumulative vulnerability of the project area to geologic hazards.

Land with soils suitable for agriculture is often consumed by urban development. The proposed power plant would be located on a 77-acre parcel of land surrounded by freeways, other roads and industrial facilities. Umatilla County has zoned the parcel for industrial and commercial use and does not intend it to be used for agricultural purposes. The proposed power plant site was formerly used as a gravel yard and currently is sparsely vegetated.

Portions of the natural gas pipeline and the reclaimed water lines would traverse lands used for agriculture. Topsoil would be removed during construction of the pipelines and replaced after pipe installation. The agricultural productivity of the land would be unaffected.

Hydrology and Water Quality

The proposed project would use water diverted from the Columbia River by the Port of Umatilla, consistent with the port's existing water rights. The Umatilla Generating Company L.P. would receive a maximum of 3.74 million gallons per day for use at the proposed project. This is about 2% of Port of Umatilla's water right. The amount of water used by the proposed project, a maximum of 3.74 million gallons per day, would be small compared to the discharge of the Columbia River in the reach near Umatilla. It would represent less than 0.005% of river discharge and consequently its diversion would have a negligible effect on downstream beneficial uses of the river.

Wastewater from the proposed project would be reclaimed and applied to cropland in an area several miles south of the proposed power plant site. Reclaimed water would be blended with surface water from another source to reduce its total dissolved solids content to a level no greater than would occur if groundwater were used for irrigation.

Vegetation

In the project area, much of the native shrub-grassland and grassland has been replaced by irrigated agriculture, industrial and commercial facilities, highways and residences. The only element of the proposed project that would permanently alter vegetative cover is the proposed power plant. The power plant would occupy about 20-acres of land that currently falls within Habitat Category 6, as established by the Oregon Department of Fish and Wildlife. Category 6 is the lowest habitat category and includes severely degraded areas of shrub-steppe and shrub-grass and developed or barren lands. The remaining habitat at the site would continue to be classified as Category 6.

The natural gas, water and reclaimed water pipelines would be primarily built in areas with low habitat value. Short sections of the natural gas and reclaimed water pipelines pass through moderate quality shrub-steppe and shrub-grass. In these areas, topsoil would be retained and replaced, and the disturbed area would be re-seeded with native vegetation.

Wildlife

Because the proposed project would not result in a permanent loss of high value habitat, it would not have an adverse impact on wildlife. Some wildlife species could be temporarily disturbed by noise and human activity during the construction period. Mitigation measures are included in the project to lessen these adverse effects.

Fish

The proposed project would have no direct effects on fish. The amount of water withdrawn from the Columbia River for the proposed project would be very small relative to river discharge. It would have a negligible effect on fish habitat.

Air Quality

The proposed project would use advanced combined-cycle gas turbine technology, clean-burning natural gas, and high-efficiency air emission control technology. Air pollutant emissions would meet or exceed current applicable emission limits.

Existing air quality in the project region is better than state and federal standards. The proposed project alone would not cause existing air quality to deteriorate significantly. It would contribute to the cumulative deterioration in air quality that is likely to result from the operation of a number of new electric power generation plants in Eastern Oregon and Washington.

Traffic and Circulation

The proposed project would create approximately 10 permanent jobs and an estimated 40 trips per day. The small increase in trips on local roads associated with the proposed project would not be expected to create traffic congestion or a diminution of level of service at any affected intersections.

Visual Quality and Aesthetics

The proposed project would add a large industrial structure to a local landscape already dominated by several other large industrial structures, including the Hermiston Generating Plant, the Lamb-Weston potato processing plant, and a number of potato sheds. These structures are within one mile of the proposed project site. At times, the proposed project would emit a visible steam plume from its cooling towers. Similar plumes are emitted by the cooling towers at the Hermiston Generating Plant and the Lamb-Weston facility. The proposed project would not greatly alter or have a significant adverse effect on aesthetic qualities.

Cultural Resources

Although cultural and historic resources exist within the vicinity of the proposed project, none would be directly affected by the proposed project. One element of the project, a natural gas pipeline, would cross under the Highline Canal, an historical irrigation canal, but would not affect either its appearance or its structural integrity.

Land Use Plans, and Policies

The proposed project would be consistent with current land use plans and policies and consequently would have no adverse effect on land use. The power plant site is zoned for light industrial use, and related or supporting facilities cross different zones.

Socioeconomics

The proposed project would create approximately 10 full-time jobs that could cause a very small in-migration of skilled workers and a small increase in local population. It would contribute to the current moderate population and economic growth rate in Umatilla County.

Public Services and Utilities

The proposed project would result in a substantial increase in the local property tax base but very little increase in the demand for public services. Consequently, the proposed project would provide funding for of a better level of public services than are available today.

Health and Safety

Some elements of the proposed project could potentially increase risk to public health and safety. They include the transmission of natural gas in an underground pipeline and use and storage of hazardous chemicals. Although safety features would be built into the proposed project to reduce hazards to public health and safety, the risk of accidents cannot be completely eliminated. The same is true for all existing and future industrial facilities in the area. Thus, the proposed project and other industrial facilities in the vicinity pose some cumulative risk to public health and safety.

The proposed project would be a new source of noise but one that complies with Oregon's noise control regulations. Other significant noise sources in the vicinity of the site include the Hermiston Generating Plant, traffic on Interstate Highways 82 and 84, and trains on the Union Pacific Railroad line.

Oregon's noise control regulations limit noise levels at residences and other sensitive noise receptors. The proposed project would not cause noise levels to exceed applicable standards at the residences nearest to the proposed project.

The proposed project would cause an increase in electric and magnetic fields at some locations close to the reconductored transmission line.

AREAS OF CONTROVERSY

The proposed project does not appear to be controversial. Approximately 30 people attended the scoping meeting including representatives of BPA and the project proponent. Nine comments were recorded at the meeting. In addition, BPA received one comment letter, two e-mail comments and one telephone comment. None of the commentators objected strongly to the proposed project. Topics raised in the comments included alternatives to the proposed project, visual impacts, air quality, climate change, cumulative impacts, the need for quantification of impacts, where possible, impacts on health and safety, water consumption and the use of union labor. All of these topics are addressed in this EIS with the exception of the last, which is outside the scope of the analysis required by NEPA.

ISSUES TO BE RESOLVED

The primary purpose of this EIS is to provide BPA with the environmental information it needs to resolve whether to connect the Umatilla Generating Project to the regional electric power grid at BPA's McNary Substation. Also to be resolved, is into which bay at the McNary Substation will the connection be made. Two alternatives are described in the EIS. The exact routing of the natural gas pipeline that would supply the proposed project is currently unresolved. Three alternatives are described in the EIS

Table S-1:
Performance Summary

DECISION FACTOR	PROPOSED ACTION	NO ACTION
Technical Performance	The proposed project would generate 550 MW of electric power.	No electric power would be generated.
Economic Performance	The proposed project would generate electric power at a lower unit cost than existing plants using older technology.	No economic costs or benefits would be created.
Environmental Performance	No significant adverse environmental effects would result.	No change in existing conditions would result.